In the Claims:

1. (Currently Amended) A method of minimizing background illumination while illuminating features formed on a substrate, said method comprising:

directing a light beam onto a lenslet array comprised of at least two lenslets; and

dividing the light beam into at least two light rays and directing said at least two light rays from said lenslet array directly onto said substrate, ~~using~~ said lenslet array having a focal plane substantially coincident with the surface of the substrate;

said lenslets of said lenslet array each directing a respective one of said light rays onto a corresponding region of said substrate that includes a feature formed on said substrate;

said width of said region and said width of said feature being substantially equal.

2. (Original) The method of claim 1 further comprising measuring a property of said feature using light detected from said feature.

3. (Original) The method of claim 1 wherein adjacent ones of said light rays are directed by said lenslets of said lenslet array onto adjacent features formed on said substrate.

4. (Original) The method of claim 1 wherein said light rays are directed by said lenslets of said lenslet array onto said substrate at an angle normal to a surface of said substrate.

5. (Original) The method of claim 1 wherein said light rays are directed by said lenslets of said lenslet array onto said substrate at an oblique angle to a surface of said substrate.

6. (Canceled)

7. (Currently Amended) A method of minimizing background illumination while illuminating features formed on a substrate, said method comprising:

directing a light beam onto a lenslet array comprised of a plurality of lenslets; and

dividing the light beam into a plurality of light rays and directing each of said plurality of light rays from said lenslet array directly onto said substrate, ~~using~~ said lenslet array having a focal plane substantially coincident with the surface of said substrate;

said lenslets of said lenslet array each directing a respective one of said light rays onto a corresponding region of said substrate that includes a feature formed on said substrate;

adjacent lenslets of said lenslet array directing adjacent ones of said light rays onto adjacent features formed on said substrate and said width of said light rays and said width of said features being substantially equal.

8. (Original) The method of claim 7 further comprising measuring a property of said features using light detected from said features.

9. (Original) The method of claim 7 wherein said lenslet array comprises a two dimensional array of lenslets.

10. (Original) The method of claim 7 wherein said light rays are directed by said lenslets of said lenslet array onto said substrate at an angle normal to a surface of said substrate.

11. (Original) The method of claim 7 wherein said light rays are directed by said lenslets of said lenslet array onto said substrate at an oblique angle to a surface of said substrate.

12. (Original) The method of claim 7 wherein said light rays are focused by said lenslets of said lenslet array at said substrate.

13. (Currently Amended) A method of measuring a property of features formed on a substrate, said method comprising:

directing a light beam onto a lenslet array comprised of at least two lenslets; and

dividing the light beam into at least two light rays and directing said light rays from said lenslet array directly onto said substrate, ~~using~~ said lenslet array having a focal plane substantially coincident with the surface of said substrate;

measuring a property of at least one feature using light detected from said feature; and

said lenslets of said lenslet array each directing a respective one of said light rays onto a corresponding region of said substrate that includes a feature formed on said substrate, and said width of each light rays and said width of said corresponding feature being substantially equal.

14. (Original) The method of claim 13 wherein said property is selected from the group consisting of: a line width, a line height, a sidewall angle, a sidewall profile, a trench depth, and a presence of an open or partially opened feature.

15. (Original) The method of claim 13 wherein said light detected from said feature is selected from the group consisting of: reflected light and scattered light.

16. (Canceled)

17. (Original) The method of claim 13 wherein adjacent ones of said light rays are directed by said lenslets of said lenslet array onto adjacent features formed on said substrate.

18. (Original) The method of claim 13 wherein said lenslet array comprises a two dimensional array of lenslets.

19. (Original) The method of claim 13 wherein said light rays are directed by said lenslets of said lenslet array onto said substrate at an angle normal to a surface of said substrate.

20. (Original) The method of claim 13 wherein said light rays are directed by said lenslets of said lenslet array onto said substrate at an oblique angle to a surface of said substrate.

21. (Canceled)

22. (Original) The method of claim 13 wherein said measuring step includes focusing said light detected from said features using a further lenslet array comprised of at least two further lenslets.

23. (Currently Amended) An apparatus for measuring a property of features formed on a substrate, said apparatus comprising:

a light source;

a target substrate having a surface;

a lenslet array comprising at least two lenslets, said lenslets of said lenslet array for dividing an incident light beam from said source into at least two light rays[[,]] having a focal plane substantially coincidental with said surface of said substrate, said lenslets of said lenslet array each directing a respective one of said light rays onto a corresponding region of said substrate that includes a feature formed on said substrate said corresponding regions of said substrate illuminated by each light ray having a selected width substantially equal to said included feature; and

a detection system operable to measure a property of said feature using light detected from said feature.

24. (Original) The apparatus of claim 23 wherein said property is selected from the group consisting of: a line width, a line height, a sidewall angle, a sidewall profile, a trench depth, and a presence of an open or partially opened feature.

25. (Original) The apparatus of claim 23 wherein said light detected from said feature is selected from the group consisting of: reflected light and scattered light.

26. (Original) The apparatus of claim 23 further comprising a control system operable to control an orientation of said lenslet array.

27. (Original) The apparatus of claim 23 further comprising a control system operable to process a measured value received from said detection system.

28. (Canceled)

29. (Original) The apparatus of claim 23 wherein said lenslets of said lenslet array direct adjacent ones of said light rays are onto adjacent features formed on said substrate.

30. (Original) The apparatus of claim 23 wherein said lenslet array comprises a two dimensional array of lenslets.

31. (Original) The apparatus of claim 23 wherein said lenslets of said lenslet array direct said light rays onto said substrate at an angle normal to a surface of said substrate.

32. (Original) The apparatus of claim 23 wherein said lenslets of said lenslet array direct said light rays onto said substrate at an oblique angle to a surface of said substrate.

33. (Original) The apparatus of claim 23 wherein said lenslets of said lenslet array focus said light rays at said substrate.

34. (Original) The apparatus of claim 23 wherein said detection system includes a further lenslet array operable to focus said light detected from said features, said further lenslet array being comprised of at least two further lenslets.